

**REMARKS**

Reconsideration and continued examination are respectfully requested. Claims 1-15 remain pending, wherein claims 1, 5, 7, 8, 12 and 15 are amended.

Initially, Applicants would like to thank Examiner Fujita for her time and courtesy during the personal interview conducted with the undersigned on October 7, 2008. The following summarizes the issues discussed during the personal interview.

In response to the objection to the drawings, Applicants have amended the specification to reference signal 16. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 1, 2, 8-12 and 15 are rejected for anticipation under 35 U.S.C. §102(e) in view of U.S. Patent Application Publication No. 2003/0048926 to Watanabe ("Watanabe"). This ground of rejection is respectfully traversed.

Applicants' amended claim 1 recites a method that operates using point feature velocity at particular positions within video images. Specifically, an iterative learning process is used "to derive a normal pattern of behavior for each position within the video image in terms of observed incidences of point feature velocity at said each position." The present behavior of a track at a certain position is compared to a derived normal pattern at the certain position in terms of observed point feature at the certain position. When the present behavior falls outside of the normal pattern behavior in terms of point feature velocity at the certain position, an alarm signal is generated. These features are not disclosed by Watanabe.

Watanabe discloses a surveillance system that can readily detect specific persons from visiting persons.<sup>1</sup> The system of Watanabe performs behavior recognition by detecting actions of a person's upper body region and comparing the image with stored template images.<sup>2</sup> The behavior is also recognized based on attitude and actions of a person.<sup>3</sup> The attitude generally relates to standing, bending, sitting positions,<sup>4</sup> while the actions appear to relate to spatial relationships between the person and the store.<sup>5</sup> The result of the behavior recognition, which is stored in personal behavior table 15, basically relates to "when", "where", "what action", for each person detected."<sup>6</sup> The personal behavior table 15 is reproduced below.



Person	Behavior record (Place, Time, Action, ...)						
	Place	Time	Action	Place	Time	Action	...
Person 00001 	Entrance ↓ Books	12:00:00 ↓ 12:00:02	Move • Walking	Books	12:00:00 ↓ 12:10:00	Stay • Standing • Reading	...
Person 00002 	Entrance ↓ Beverage	12:00:10 ↓ 12:00:13	Move • Walking	Beverage	12:00:13 ↓ 12:00:20	Stay • Standing • Pick up	...
...	...	...	...	...	...	...	...

FIGURE 9 of Watanabe

<sup>1</sup> Abstract.

<sup>2</sup> Paragraph 0084.

<sup>3</sup> Paragraph 0086.

<sup>4</sup> Paragraph 0076.

<sup>5</sup> Paragraph 0086.

<sup>6</sup> Paragraph 0087.

Accordingly, search criteria as to when and where a product is stolen can be used to identify theft suspects using the location information in personal behavioral table 15.<sup>7</sup> This information can be used to generate specific person table 24, which is illustrated in Figure 10 (reproduced below).



Record-Items	Person	Facial-features	...
High spender	Person 00001		...
	...	...	...
Theft suspect	Person 00002		...
	...	...	...
...	...	...	...

FIGURE 10 of Watanabe

Information in the specific person table 24 can be used to detect the presence of the person in the store.

As discussed during the personal interview, regarding theft suspects, Watanabe discloses using *one-time search criteria* to identify persons as theft suspects when the persons are present at a particular location at a particular time.<sup>8</sup> Watanabe does not, however, disclose that theft suspects are identified using an *iterative* learning process to derive a *normal* pattern of behavior for

<sup>7</sup> Paragraphs 0102 and 0103.

<sup>8</sup> Paragraph 0103.

*each position* within the video image in terms of *point feature velocity* for a particular position within the image.

Furthermore, in Applicants' claim 1 the present behavior is compared to the derived normal pattern of behavior to determine whether the present behavior falls outside of the normal pattern of behavior in terms of *observed point feature velocity* at the certain position within each of the video images. In contrast, Watanabe only discloses the use of *time and location*, but *not point feature velocity* to determine whether to generate an alarm.

Watanabe also discloses that specific persons can be identified based on a high average spending amount or persons who tend to buy a specific type of product.<sup>9</sup> Watanabe does not describe in detail how these users are identified. Thus, Watanabe does not disclose that these users are identified using an iterative learning process *for each position* within the video image in terms of *observed incidences of point feature velocity*, or that an alarm is generated based on the determination of whether present behavior falls outside of the normal pattern of behavior in terms of *observed point feature velocity* at a certain position within the image.

Because Watanabe does not the iterative learning process or the comparison recited in claim 1, Watanabe does not anticipate this claim. Claims 2 and 8-12 are patentably distinguishable over Watanabe at least by virtue of their dependency from claim 1. Claim 15 recites similar elements to those

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<sup>9</sup> Paragraph 0105.

discussed above with regard to claim 1, and is patentably distinguishable for similar reasons. Accordingly, the rejection of claims 2, 8-12 and 15 for anticipation by Watanabe should be withdrawn.

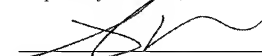
Claims 3, 4, and 7 are rejected for obviousness under 35 U.S.C. §103(a) in view of the combination of Watanabe and the article "*Visual Recognition of Emotional States*" by Schwerdt et al. ("Schwerdt"). Claim 13 is rejected for obviousness in view of the combination of Watanabe and U.S. Patent No. 4,198,653 to Kamin ("Kamin"). Claim 14 is rejected for obviousness in view of the combination of Watanabe and U.S. Patent No. 5,374,932 to Wyschogrod et al. ("Wyschogrod"). Claim 5 is rejected for obviousness in view of the combination of Watanabe, Schwerdt and U.S. Patent No. 5,546,474 to Zuniga ("Zuniga"). Claim 6 is rejected for obviousness in view of the combination of Watanabe, Schwerdt and U.S. Patent No. 7,058,205 to Jepson et al. ("Jepson"). Claims 3-7, 13 and 14 variously depend from claim 1, and are patentably distinguishable over the current grounds of rejection at least by virtue of their dependency. Accordingly, withdrawal of the rejection of these claims is respectfully requested.

In light of the foregoing remarks, this application should be in consideration for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #038819.55861US).

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Respectfully submitted,



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